

PF-0706 USN

<110> YUE, Henry
TANG, Y. Tom
AZIMZAI, Yalda

<120> SORTING NEXINS

<130> PF-0706 USN

<140> 09/744,313

<141> To Be Assigned

<150> PCT/US00/14831

<151> 2000-05-26

<150> 60/136,740

<151> 1999-05-27

<150> 60/139,566

<151> 1999-06-16

<160> 4

<170> PERL Program

<210> 1

<211> 465

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 2124842CD1

<400> 1

Met	Tyr	Leu	Ile	His	Phe	Cys	Leu	Ile	Phe	Arg	Asn	Thr	Gln	Lys
1				5					10					15
Arg	Gly	Glu	Ser	Phe	Gly	Ile	Ser	Arg	Ile	Gly	Ser	Lys	Ile	Lys
				20					25					30
Gly	Val	Phe	Lys	Ser	Thr	Thr	Met	Glu	Gly	Ala	Met	Leu	Pro	Asn
				35					40					45
Tyr	Gly	Val	Ala	Glu	Gly	Glu	Asp	Asp	Phe	Ile	Glu	Glu	Gly	Ile
				50					55					60
Val	Val	Met	Glu	Asp	Asp	Ser	Pro	Val	Glu	Ala	Val	Ser	Thr	Pro
				65					70					75
Asn	Thr	Pro	Arg	Asn	Leu	Ala	Ala	Trp	Lys	Ile	Ser	Ile	Pro	Tyr
				80					85					90
Val	Asp	Phe	Phe	Glu	Asp	Pro	Ser	Ser	Glu	Arg	Lys	Glu	Lys	Lys
				95					100					105
Glu	Arg	Ile	Pro	Val	Phe	Cys	Ile	Asp	Val	Glu	Arg	Asn	Asp	Arg
				110					115					120
Arg	Ala	Val	Gly	His	Glu	Pro	Glu	His	Trp	Ser	Val	Tyr	Arg	Arg
				125					130					135
Tyr	Leu	Glu	Phe	Tyr	Val	Leu	Glu	Ser	Lys	Leu	Thr	Glu	Phe	His
				140					145					150
Gly	Ala	Phe	Pro	Asp	Ala	Gln	Leu	Pro	Ser	Lys	Arg	Ile	Ile	Gly
				155					160					165
Pro	Lys	Asn	Tyr	Glu	Phe	Leu	Lys	Ser	Lys	Arg	Glu	Glu	Phe	Gln
				170					175					180
Glu	Tyr	Leu	Gln	Lys	Leu	Leu	Gln	His	Pro	Glu	Leu	Ser	Asn	Ser
				185					190					195

Gln Leu Leu Ala	Phe Leu Ser Pro	Asn Gly Gly G	Thr Gln
200		205	210
Phe Leu Asp Lys	Ile Leu Pro Asp Val	Asn Leu Gly Lys Ile	Ile
215		220	225
Lys Ser Val Pro	Gly Lys Leu Met Lys	Glu Lys Gly Gln His	Leu
230		235	240
Glu Pro Phe Ile	Met Asn Phe Ile Asn	Ser Cys Glu Ser Pro	Lys
245		250	255
Pro Lys Pro Ser	Arg Pro Glu Leu Thr	Ile Leu Ser Pro Thr	Ser
260		265	270
Glu Asn Asn Lys	Lys Leu Phe Asn Asp	Leu Phe Lys Asn Asn	Ala
275		280	285
Asn Arg Ala Glu	Asn Thr Glu Arg Lys	Gln Asn Gln Asn Tyr	Phe
290		295	300
Met Glu Val Met	Thr Val Glu Gly Val	Tyr Asp Tyr Leu Met	Tyr
305		310	315
Val Gly Arg Val	Val Phe Gln Val Pro	Asp Trp Leu His His	Leu
320		325	330
Leu Met Gly Thr	Arg Ile Leu Phe Lys	Asn Thr Leu Glu Met	Tyr
335		340	345
Thr Asp Tyr Tyr	Leu Gln Cys Lys Leu	Glu Gln Leu Phe Gln	Glu
350		355	360
His Arg Leu Val	Ser Leu Ile Thr Leu	Leu Arg Asp Ala Ile	Phe
365		370	375
Cys Glu Asn Thr	Glu Pro Arg Ser Leu	Gln Asp Lys Gln Lys	Gly
380		385	390
Ala Lys Gln Thr	Phe Glu Glu Met Met	Asn Tyr Ile Pro Asp	Leu
395		400	405
Leu Val Lys Cys	Ile Gly Glu Glu Thr	Lys Tyr Glu Ser Ile	Arg
410		415	420
Leu Leu Phe Asp	Gly Leu Gln Gln Pro	Val Leu Asn Lys Gln	Leu
425		430	435
Thr Tyr Val Leu	Leu Asp Ile Val Ile	Gln Glu Leu Phe Pro	Glu
440		445	450
Leu Asn Lys Val	Gln Lys Glu Val Thr	Ser Val Thr Ser Trp	Met
455		460	465

<210> 2

<211> 450

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 5215690CD1

<400> 2

Met Glu Gln Ala	Pro Pro Asp Pro	Glu Arg Gln Leu Gln	Pro Ala
1	5	10	15
Pro Leu Glu Pro	Leu Gly Ser Pro	Asp Ala Gly Leu Gly	Ala Ala
20		25	30
Val Gly Lys Glu	Ala Glu Gly Ala	Gly Glu Glu Ser	Ser Gly Val
35		40	45
Asp Thr Met Thr	His Asn Asn Phe	Trp Leu Lys Lys	Ile Glu Ile
50		55	60
Ser Val Ser Glu	Ala Glu Lys Arg	Thr Gly Arg Asn	Ala Met Asn
65		70	75
Met Gln Glu Thr	Tyr Thr Ala Tyr	Leu Ile Glu Thr	Arg Ser Val

										85					90
Glu	His	Thr	Asp	Gly	Gln	Ser	Val	Leu	Thr	Asp	Ser	Leu	Trp	Arg	
				95						100					105
Arg	Tyr	Ser	Glu	Phe	Glu	Leu	Leu	Arg	Ser	Tyr	Leu	Leu	Val	Tyr	
				110						115					120
Tyr	Pro	His	Ile	Val	Val	Pro	Pro	Leu	Pro	Glu	Lys	Arg	Ala	Glu	
				125						130					135
Phe	Val	Trp	His	Lys	Leu	Ser	Ala	Asp	Asn	Met	Asp	Pro	Asp	Phe	
				140						145					150
Val	Glu	Arg	Arg	Arg	Ile	Gly	Leu	Glu	Asn	Phe	Leu	Leu	Arg	Ile	
				155						160					165
Ala	Ser	His	Pro	Ile	Leu	Cys	Arg	Asp	Lys	Ile	Phe	Tyr	Leu	Phe	
				170						175					180
Leu	Thr	Gln	Glu	Gly	Asn	Trp	Lys	Glu	Thr	Val	Asn	Glu	Thr	Gly	
				185						190					195
Phe	Gln	Leu	Lys	Ala	Asp	Ser	Arg	Leu	Lys	Ala	Leu	Asn	Ala	Thr	
				200						205					210
Phe	Arg	Val	Lys	Asn	Pro	Asp	Lys	Arg	Phe	Thr	Asp	Leu	Lys	His	
				215						220					225
Tyr	Ser	Asp	Glu	Leu	Gln	Ser	Val	Ile	Ser	His	Leu	Leu	Arg	Val	
				230						235					240
Arg	Ala	Arg	Val	Ala	Asp	Arg	Leu	Tyr	Gly	Val	Tyr	Lys	Val	His	
				245						250					255
Gly	Asn	Tyr	Gly	Arg	Val	Phe	Ser	Glu	Trp	Ser	Ala	Ile	Glu	Lys	
				260						265					270
Glu	Met	Gly	Asp	Gly	Leu	Gln	Ser	Ala	Gly	His	His	Met	Asp	Val	
				275						280					285
Tyr	Ala	Ser	Ser	Ile	Asp	Asp	Ile	Leu	Glu	Asp	Glu	Glu	His	Tyr	
				290						295					300
Ala	Asp	Gln	Leu	Lys	Glu	Tyr	Leu	Phe	Tyr	Ala	Glu	Ala	Leu	Arg	
				305						310					315
Ala	Val	Cys	Arg	Lys	His	Glu	Leu	Met	Gln	Tyr	Asp	Leu	Glu	Met	
				320						325					330
Ala	Ala	Gln	Asp	Leu	Ala	Ser	Lys	Lys	Gln	Gln	Cys	Glu	Glu	Leu	
				335						340					345
Val	Thr	Gly	Thr	Val	Arg	Thr	Phe	Ser	Leu	Lys	Gly	Met	Thr	Thr	
				350						355					360
Lys	Leu	Phe	Gly	Gln	Glu	Thr	Pro	Glu	Gln	Arg	Glu	Ala	Arg	Ile	
				365						370					375
Lys	Val	Leu	Glu	Glu	Gln	Ile	Asn	Glu	Gly	Glu	Gln	Gln	Leu	Lys	
				380						385					390
Ser	Lys	Asn	Leu	Glu	Gly	Arg	Glu	Phe	Val	Lys	Asn	Ala	Trp	Ala	
				395						400					405
Asp	Ile	Glu	Arg	Phe	Lys	Glu	Gln	Lys	Asn	Arg	Asp	Leu	Lys	Glu	
				410						415					420
Ala	Leu	Ile	Ser	Tyr	Ala	Val	Met	Gln	Ile	Ser	Met	Cys	Lys	Lys	
				425						430					435
Gly	Ile	Gln	Val	Trp	Thr	Asn	Ala	Lys	Glu	Cys	Phe	Ser	Lys	Met	
				440						445					450

<210> 3

<211> 1992

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 2124842CB1

<400> 3

```

gtatgaaaac tccaaaagtt atgttagcta taccttttagt ttatcatttt caaaactggt 60
tttctttttt ttttaataatg tttttcaata aactagactg ttgtgataat ttgctatgta 120
cttgatacat ttttgtttaa tattcaggaa cacacagaaa aggggagaat cttttggaat 180
cagcagaata ggtagcaaaa ttaaaggagt attcaaaagt accacaatgg agggagctat 240
gttgcctaata tatggtgtag ctgaagggtga agatgatttt attgaagaag gtattgttgt 300
aatggaagat gattctccag tggaggctgt gagcacacct aatactcccc gaaaccttgc 360
tgcattgaaa attagcattc catatgtaga cttttttgag gatccctcct ctgaaaggaa 420
ggagaaaaaa gaaagaattc ctgtgttttg tattgatgtt gaaagaaatg atagaagagc 480
agttggacac gagcctgaac attggtctgt ctatagaaga tatcttgaat tctatgtact 540
tgaatcaaaa ctaacagaat ttcatgggtgc atttctgat gccagcttc cttctaagag 600
gatcattggc cccaaaaatt atgaattctt aaagtcaaag aggggaagagt tccaagaata 660
tctacagaaa cttctgcagc atccagaact gagtaatagt caacttctgg cagactttct 720
ttcccctaata ggtggggaaa cacaatttct tgataagata ctaccagatg taaatcttgg 780
gaaaattata aaatctgttc ctggaaaact aatgaaagag aaagggtcagc atttggaaac 840
ttttatcatg aatttctatta attcttgtga gtctccaaag cctaaaccaa gtagaccaga 900
actgaccatt ctcagcccta cttcagaaaa caacaagaag cttttcaatg atctgtttaa 960
aaataatgca aaccgtgctg aaaatacaga gagaaagcaa aatcagaatt attttatgga 1020
ggtgatgact gtagaaggag tctatgatta cctgatgtat gtaggacggg tagttttcca 1080
ggttcctgac tggcttcac atctcttaat gggaaactcga atcctcttta aaaacaccct 1140
ggaaatgtat actgattact atcttcagtg taaactagaa cagctatttc aggagcaccg 1200
tttgggtctca ctcataaacac ttctcagaga tgctatatte tgtgaaaaca ctgaacctcg 1260
ctctctccaa gataagcaaa aaggagcaaa acagactttt gaagaaatga tgaattacat 1320
tccagatctg ttagtcaagt gtattggtga agaaaccaag tatgaaagca tcagacttct 1380
gtttgatggc ttacagcaac cagtactcaa caagcagctg acttatgttt tattggacat 1440
tgtgatacag gaactgtttc cagagctcaa taaggtaaca aaggaagtta cctctgtgac 1500
atcttggatg taaacacttg gatttgggtat agaataacce attgaaattt ctgctgtgag 1560
aggggtggtag aaatttactt ttttgggtat attcttatat atattatgta catcgtgtgc 1620
tgaaattttta gttatttttt gtttttaata aagactaaca caaacttaat gattaaaagt 1680
gattgagtct catagtcttt catttgctag ctgtgatcca aattttatta gaacataagt 1740
cacttgttat tgccattttt aaaagagaaa attcataatg atgttatggc aaacagataa 1800
gactgataaa cttcgtattg tatagctttg aaaataatta tgcttagtat ggagaaacag 1860
gaataagatc tgattttctt agagttaata tatttttagta gatttggttt cctttttttt 1920
attttgtaca tagttaactg tgtatctata aataaagcat cctatatgag tttttaataa 1980
taaaaaaaaa aa 1992

```

<210> 4

<211> 2507

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 5215690CB1

<400> 4

```

cgcgccgaac tgcagccatg gagcaggcac ctccggaccc cgagcggcag ctccagccgg 60
cgcccttgga gccgctgggc tcccagacg ctgggctggg ggctgcggtc ggcaagggaag 120
cggagggggc cggagaagag agctctgggg tcgacacgat gacacacaat aatttttggt 180
tgaagaagat agaaatcagt gtttcagaag cagaaaaacg aactggaaga aatgccatga 240
acatgcaaga aacatatact gcttacctca ttgaaacaag gtcagttgaa cataccgatg 300
gtcagagtgt cctaacagac tcactatggc ggcgatatag tgaatttgag ttgttgagaa 360
gctacctttt agtttactat ccacatattg ttgtgccacc tctgccagaa aaacgggcag 420
aatttgtttg gcataaactc tctgtgaca acatggatcc agattttgtg gagaggcgac 480
ggattggttt agaaaacttt ctcttgagga ttgcttcaca tcccctcctt tgtagagaca 540
aaatcttcta tctgttttta acacaggaag gtaactggaa ggagactgtg aatgaaactg 600
ggtttcagct gaaggcagac tccagggtta aagcgcttaa tgcaacattc agagtgaata 660
acccagacaa gagatttact gaccttaagc actatagtga tgaactgcag tctgtcatct 720
cacatcttct tcgagtcaga gctagagtag cagatcgact ctatgggtga tataaagtac 780

```

atgggaatta	tggtcgctt	ttcagtgaat	ggagtgccat	agaaaagaa	atgggtgatg	840
gactgcagag	tgctgggtcat	catatggatg	tgtatgcac	ttctattgat	gatattttgg	900
aagatgaaga	acattatgca	gatcagttaa	aagagtatct	tttttatgca	gaagcattgc	960
gggctgtgtg	caggaaacat	gaacttatgc	agtatgactt	ggagatggct	gctcaggact	1020
tagcatccaa	gaagcagcag	tgtgaggaac	tggtaaactgg	gactgtgaga	acattctctt	1080
tgaagggaat	gactaccaag	ctctttggtc	aagaaactcc	agagcagaga	gaagccagaa	1140
taaagggtgct	agaagaacaa	ataaatgaag	gagaacaaca	gctaaagtct	aaaaatctgg	1200
aaggcagaga	atttgtgaaa	aacgcacatggg	ctgatattga	acgcttcaaa	gaacaaaaga	1260
accgagactt	aaaggaggcc	ctcataagct	atgcagtcac	gcagatcagt	atgtgcaaaa	1320
aggggaattca	agtttggacc	aatgctaagg	aatgctttag	caagatgtaa	tcctgtgaat	1380
tgaatttctc	ttcaatcaaa	gtgccccaaa	acagaagcac	aagtaaataa	aagaaattta	1440
agtcactacc	tagtatacat	aaacatatatac	aataagttaa	ataaattcag	ctttctttta	1500
cttaattgtg	gtcgtgttaa	tgtagcacia	aaaatatatt	ttaatgaaga	ttaaatatta	1560
taatttgagg	ttttggggac	tggtgctgat	tccaaaaagt	taatttaata	atatatacca	1620
acagattgtt	tgtcacgctt	ctgaaccaat	gactgaatgt	caagatgttc	gttaatttct	1680
agatgtttgt	ttcaagacca	gctgtttcag	atctattaat	gtaggggaatt	tttccttaag	1740
attgaattcc	tatatattact	tggttaagac	cactaatctg	ttataggagg	ttgttttctc	1800
ttgccttata	gttgagctat	ttggtttgac	aaagctcagc	agaaacttga	tgtgaaaaat	1860
ctacgatttt	cttctacatt	cattgatgcc	ccttgtaatg	tttgcataca	ctagaaaatg	1920
ccttcaattt	gtgtttttacc	agaattttga	tactggtcag	aaattttata	ctgccaacaa	1980
agaagactca	acttctcaga	tctataatgg	gatacattgt	catcctctag	caactcctat	2040
atagaaaagt	ttaactgaat	atgttacata	taagaattaa	attccttctca	aataattctt	2100
aacctcagta	atgagcctaa	atttactctg	cttggtcttc	tacacatggc	atttcagggt	2160
ataagatgta	gcatttcaat	gtgtaagata	tatgtactaa	acatatgtgt	tgctatcttc	2220
atcattaaca	tccttctttt	ctattgcttg	gctgtaattt	ttgtaaagat	aaatttatatt	2280
gtttttttgt	atgtgtgttt	gtagtatatg	ttcagaaggc	aagcatcttc	attttgctag	2340
ctttgcagaa	tcttaaaatg	tgtactcggt	atttctaattg	atgtaaaaaa	aaatccctag	2400
tcctgttttag	catttgactt	ttttatatgt	tttaaatgtt	gctggatttt	tgtgctgttt	2460
gccaaactta	tacaataaat	aatgaaata	ttgtgctgaa	aaaaaaa		2507